

Title (en)  
MACHINE-BASED RISK PREDICTION FOR PERI-PROCEDURAL MYOCARDIAL INFARCTION OR COMPLICATION FROM MEDICAL DATA

Title (de)  
MASCHINENBASIERTE RISIKOVORHERSAGE FÜR PERI-PROZEDURALE MYOKARDINFARKTE ODER KOMPLIKATIONEN AUS MEDIZINISCHEN DATEN

Title (fr)  
PRÉDICTION DE RISQUE À BASE DE MACHINE D'UN INFARCTUS MYOCARDIQUE PÉRIOPÉRATOIRE OU D'UNE COMPLICATION À PARTIR DE DONNÉES MÉDICALES

Publication  
**EP 3866176 A1 20210818 (EN)**

Application  
**EP 20464004 A 20200217**

Priority  
EP 20464004 A 20200217

Abstract (en)  
Machine-based risk prediction or assistance is provided for peri-procedural complication, such as peri-procedural myocardial infarction (PMI). A machine-learned model (45) is used to predict (23) risk of PMI and/or recommend (24) courses of action to avoid PMI in PCI. Various combinations of types or modes of information are used in the prediction, such as both imaging (21) and non-imaging (21) data. The prediction (23) may be made prior to, during, and/or after PCI using the machine-learned model (45) to more quickly reduce the chance of PMI. The workflows for prior, during, and/or post PCI incorporate the risk prediction (23) and/or risk-based recommendations (24) to reduce PMI for patients.

IPC 8 full level  
**G16H 50/20** (2018.01); **G16H 50/70** (2018.01)

CPC (source: CN EP US)  
**A61B 5/02007** (2013.01 - CN); **A61B 5/055** (2013.01 - CN US); **A61B 5/346** (2021.01 - US); **A61B 5/7267** (2013.01 - CN US); **A61B 5/7275** (2013.01 - CN US); **A61B 5/742** (2013.01 - US); **A61B 6/032** (2013.01 - CN US); **A61B 6/504** (2013.01 - US); **A61B 6/5211** (2013.01 - CN); **A61B 6/5217** (2013.01 - US); **G06N 3/04** (2013.01 - US); **G06N 3/045** (2023.01 - CN); **G06N 3/08** (2013.01 - CN US); **G06T 7/0012** (2013.01 - US); **G16H 30/40** (2018.01 - US); **G16H 50/20** (2018.01 - EP US); **G16H 50/30** (2018.01 - CN US); **G16H 50/70** (2018.01 - EP); **A61B 5/0066** (2013.01 - US); **A61B 5/02028** (2013.01 - US); **A61B 8/12** (2013.01 - US); **G06T 2207/20081** (2013.01 - US); **G06T 2207/20084** (2013.01 - US); **G06T 2207/30048** (2013.01 - US); **G16H 30/40** (2018.01 - EP)

Citation (search report)  
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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3866176 A1 20210818**; CN 113261939 A 20210817; US 11826175 B2 20231128; US 2021251577 A1 20210819

DOCDB simple family (application)  
**EP 20464004 A 20200217**; CN 202110190648 A 20210218; US 202117248455 A 20210126